

## **STATEMENT OF CONSIDERATIONS**

### **REQUEST BY AMENDED SILICATES, LLC, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC26-04NT41988; W(A)-04-001, CH-1172**

The Petitioner, Amended Silicates, was awarded this cooperative agreement for the performance of work entitled, "Large Scale Mercury Control Technology Field Testing Program." The purpose of the cooperative agreement is to conduct a demonstration of the use of Amended Silicates™ for the removal of mercury from the flue gas of an operating power plant in North Bend, Ohio. Activated carbon and Amended Silicate sorbents will be injected into the plant flue gas stream during the testing period. Measurements of mercury content of flue gas will be made to characterize the mercury removal efficiency of the sorbent materials. Amended Silicates is a joint venture between ADA Technologies, a small business, and CH2M Hill Corporation, a large business. The waiver is directed to inventions of Amended Silicates made under this cooperative agreement.

The total estimated cost of the cooperative agreement is \$1,208,316<sup>1</sup>, with the DOE share being \$900,000 or 75%, while the remaining cost share of 25%, or \$308,316, will be provided by Amended Silicates and its subcontractor, Cinergy. Cinergy is providing its power plant in North Bend, Ohio for the location of this project. Of this cost share, Amended Silicates is contributing \$54,000 while Cinergy is providing \$254,316. An e-mail from Mr. J. Michael Geers from Cinergy is attached to this Statement of Considerations indicating Cinergy's consent in Amended Silicates' obtaining title to its own inventions under this agreement. The period of performance is from December 2003 through April 2005.

In its response to question 5 of the attached waiver petition, Amended Silicates has described its technical competence in the field of mercury emission control. One of its founders, ADA Technologies, has ten years experience in leading research in mercury emission control. It has been granted eight patents related to mercury monitoring, stabilization, and removal. Further, ADA Technologies has a pending patent application entitled "High Capacity Regenerable Sorbent for Removal of Mercury from Flue Gas, which invention specifically covers the concept and preparation of the sorbent material to be evaluated in this project. A list of these relevant patents is provided in Appendix 2 to the petition. The '957 patent was made in the performance of a DOE cooperative agreement. Amended Silicates' other joint venture partner, CH2M Hill, is a leading provider of engineering and project delivery services nationwide, and specializes in projects that extend new technology. Amended Silicates' response demonstrates its technical competency in the field of mercury emission control.

In its response to question 10 of the attached waiver petition, Amended Silicates states that the results of this cooperative agreement are expected to provide a cost effective alternative to activated carbon technology, the current market leader. By providing a cost effective competitive technology, Amended Silicates states that it will encourage in general the continued advancement of sorbent technologies resulting in the reduction of costs for mercury control to electric utilities. By providing a cost effective, competitive alternative to the current market leader, grant of the waiver will have a positive effect on competition and market concentration.

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<sup>1</sup> The total contract amount asserted in the waiver petition differs from this amount. An e-mail from Amended Silicates is attached to this Statement of Considerations indicates the petitioner's agreement with these amounts.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein Amended Silicates has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Amended Silicates agrees to substantial U. S. manufacture of subject inventions (attached hereto). Additionally, Amended Silicates agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements. The petitioner has further agreed to modification of the data clause of the subject cooperative agreement (48 C.F.R. 952.227-14) by adding paragraph (k), Alternative VI, concerning contractor licensing of data

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

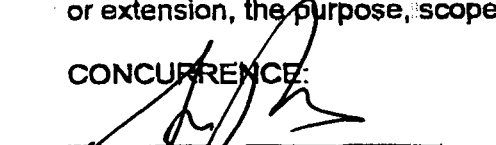


Mark P. Dvorscak  
Assistant Chief Counsel  
Intellectual Property Law Division

Date: Sept 7, 2004


Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:

  
George Rudins, FE-20  
Deputy Assistant Secretary *VR*  
Coal and Power Systems *dc*  
Office of Fossil Energy

Date: Sept. 24, 2004

APPROVAL:

  
Paul A. Gottlieb  
Assistant General Counsel  
for Technology Transfer and  
Intellectual Property

Date: 10-4-06

(t) U. S. COMPETITIVENESS The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.